

## SUMMARY OF APRIL 2006 REVISIONS - VERSION 1.4.0.4

Since the release of ABLRFD Version 1.4.0.3 several revision requests and user requested enhancements have been received. This release of ABLRFD Version 1.4.0.4 contains the following revisions and enhancements.

1. The program was revised to allow the top of rock layer to be equal with the top of the footing. Previously the program would halt with an error for this condition (Request 196).
2. The angle ( $\delta_r$ ) of the partial earth pressure applied to the heel ( $P_{a1}$ ), used in the internal Footing EH-V calculations from User Manual Section 3.3.2.5.2, was corrected for the Coulomb failure method. Previously, for the Coulomb method the program would calculate a lesser Internal Footing EH-V force due to the use of the incorrect angle which could lead to unconservative perpendicular heel reinforcement. The Rankine method is unaffected by this revision (Request 196).
3. The program has been modified to use the correct  $K_a$  value for the Internal Footing EH-V force calculation for the temporary stage. Previously the program would use the final  $K_a$  value for both the temporary and final stage Internal Footing EH-V calculations (Request 202).